VISN 5 MIRECC Research Abstract

The Generalization of Training in Schizophrenia Wendy N. Tenhula, PhD Mentors: Alan S. Bellack, PhD, ABPP & James Gold, PhD

Schizophrenia is a disorder associated with diminished life satisfaction, poor social and occupational functioning, neurocognitive impairments, and profound deficits in social competence. For the most part, these deficits are not ameliorated by pharmacotherapy. Social skills training (SST) has been shown to be effective in teaching social skills to people with schizophrenia, but there is little evidence about the extent to which the proximal effects of training generalize to the community: whether patients actually use newly learned skills outside of the clinic. Although the link between cognitive impairments and functional outcomes, including social function and work performance, is not clearly understood, recent advances in the neuropsychology of schizophrenia make it increasingly apparent that social dysfunction in the community is at least partially mediated by cognitive deficits, and that these deficits are in turn correlated with the effects of social skills training. These findings raise the possibility that the functional impact of skills training strategies may be restricted by cognitive deficits that serve as "rate limiting" factors on learning and generalization. The primary goals of this project are to investigate the learning and generalization of work-focused social skills and examine the role of neuropsychological factors in the learning and generalization of social skills.

Subjects will participate in two inter-related components of this study: a) a neuropsychological trial in which the generalization of training from the Wisconsin Card Sorting Test (WCST) to the Halstead Category Test (CT) will be assessed, and b) a clinical trial in which they receive social skills training focused on social interactions at work. We will examine pre- to post-intervention changes within the very specific domain targeted by the SST (i.e., work-related social skills as assessed in the laboratory) and the generalization of training to social interactions in the work place. The ability to learn and generalize training across neuropsychological tasks of problem solving will be viewed as indices of "cognitive capacity" used to predict the ability to benefit from social skills training. We will also examine other neuropsychological factors that may limit generalization and the relationship of neuropsychological factors to social skill and social problem solving ability. This investigation of the transfer of training (i.e., generalization) will allow us to better predict which patients may profit from skills training, identify specific targets for cognitive rehabilitation, and develop more effective rehabilitation techniques for patients with schizophrenia.